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REMARKS/ARGUMENTS

Claims 1-24 are pending in this Application.

Claims 1-3, 7-9, 13-15, and 19-21 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Sato et al. (U.S. 5,424,602) in view of Lejeune (U.S. 6,269,326). Claims 4-6, 10-12, 16-18, and 22-24 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Sato et al. in view of Lejeune, and further in view of Onishi et al. (JP 2000-216450). Claims 4-6, 10-12, 16-18, and 22-24 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Sato et al. in view of Lejeune, and further in view of Kawada (U.S. 3,778,648). Applicants respectfully traverse the rejections of claims 1-24.

Claim 1 recites:

**"A method for selecting a piezoelectric transformer having a desired characteristic which is performed in a method of manufacturing a piezoelectric transformer, comprising the steps of:**  
**connecting a primary-side driving section of a piezoelectric transformer to a high-frequency generator while leaving a secondary-side generating section thereof in an open state;**  
**causing said high-frequency generator to sequentially generate and sweep a high-frequency signal over a predetermined frequency range;**  
**measuring a resonant frequency of an input-impedance-versus-frequency characteristic of the piezoelectric transformer;**  
**selecting the piezoelectric transformer if said piezoelectric transformer has a desired characteristic based on the value of the measured resonant frequency;**  
**rejecting the piezoelectric transformer if the piezoelectric transformer does not have a desired characteristic based on the value of the measured resonant frequency; and**  
**completing the manufacturing of the piezoelectric transformer after the steps of selecting and rejecting."** (emphasis added)

Claims 4, 7, 10, 13, 16, 19 and 22 recite features and method steps that are similar to the features and method steps recited in claim 1, including the above-emphasized feature.

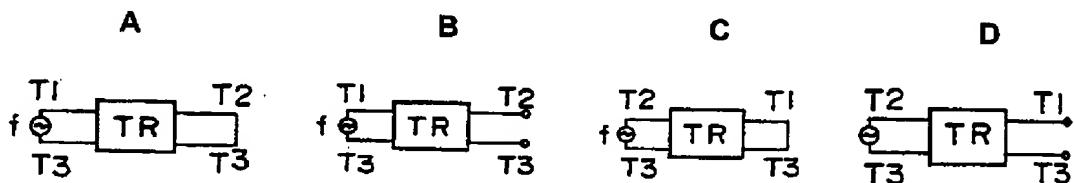
First, as argued in the previous Amendment dated March 24, 2003, Request for

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Reconsideration dated August 11, 2003, and Amendment dated January 15, 2004, Sato et al. merely measures the characteristics of the piezoelectric transformer after the piezoelectric transformer has been manufactured. Sato et al. only shows these characteristics to establish that the invention described therein overcomes the problems of the prior art as described in Sato et al.

Further, **Figs. 38(A)-38(D)** of Sato et al. merely show a typical impedance v. frequency response of the illustrated piezoelectric transformer. One of ordinary skill in the art would understand that a typical piezoelectric transformer of Sato et al. would not need to be tested after manufacturing because each of the piezoelectric transformers would have substantially similar characteristics to the allegedly superior characteristics shown in **Figs. 38(A)-38(D)**, as compared to the characteristics of the prior art devices described in Sato et al.

The Examiner alleged that Sato et al. teaches the feature of "completing the manufacturing of the piezoelectric transformer after the steps of selecting and rejecting" as recited in Applicants' claims 1, 4, 7, 10, 13, 16, 19, and 22. To support this allegation, the Examiner relied upon the following portions of **Figs. 38(A)-(D)** of Sato et al.:



The Examiner alleged in the paragraph bridging pages 2 and 3 of the outstanding Office Action, that these portions of Sato et al. disclose a step of measuring the frequencies before the completion of manufacturing of the piezoelectric transformer because the piezoelectric transformers are "in an isolated state" before they are mounted as shown in **Figs. 30(A) and 30(B)** of Sato et al.

Applicants are completely bewildered by these allegations. There is absolutely no disclosure, showing, teaching or suggestion of testing a piezoelectric transformer in

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an isolated state before it is a finished product, or the steps of selecting a piezoelectric transformer, rejecting a piezoelectric transformer or completing the manufacturing of the piezoelectric transformer after performing the steps of rejecting or selecting.

All that is shown in **Figs. 38(A)-(D)** of Sato et al. is conceptually/schematically how the impedance-frequency characteristics of the FINISHED transformer are measured.

Applicants respectfully submit that one of ordinary skill in the art would easily recognize that the above-illustrated portions of **Figs. 38(A)-(D)** of Sato et al. are conceptual in nature and are not intended in any way to depict an actual state of a transformer when it is being tested. Further, the Examiner's allegations are completely unsupported by the schematic drawings of a box enclosing the letters "TR" shown in **Figs. 38(A)-(D)** of Sato et al. These schematic drawings are completely devoid of any structural detail which might shed some light upon what state the transformer is in at that stage, and the schematic drawings certainly fail to disclose what stage of manufacturing the piezoelectric transformer is in when the frequencies of the piezoelectric transformer are measured. The Examiner has completely failed to explain why the schematic drawing of a box enclosing the letters "TR" (1) must include an uncompleted transformer; and (2) does not include the arrangement shown in **Figs. 30(A) and 30(B)** of Sato et al. in which the manufacturing of the piezoelectric transformer is completed.

The Examiner's allegation in the paragraph bridging pages 2 and 3 of the outstanding Office Action that "the figures relied upon regarding this, 38A-D, still show the testing of the device before it is mounted" completely ignores the nature and purpose of schematic drawings. The nature and purpose of schematic drawings is that they omit structural features such that the principle to be illustrated is more easily understood without unnecessary structural details. Thus, Applicants respectfully submit that, contrary to the Examiner's allegation, one of ordinary skill in the art would have absolutely understood that it is impossible to determine whether or not the piezoelectric

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transformer is mounted or whether or not the manufacturing of the piezoelectric transformer is completed from the schematic drawings in Figs. 38(A)-(D) of Sato et al.

There is absolutely nothing in Sato et al. that shows or suggests the state of the transformer when the impedance-frequency characteristic is measured, or that the transformer is tested before manufacturing thereof is completed. Further, there is absolutely nothing in Sato et al. that shows or suggests the steps of selecting, rejecting and completing manufacturing are performing steps of selecting and rejecting. Thus, contrary to the Examiner's allegations, Sato et al. fails to teach or suggest the steps of "selecting the piezoelectric transformer if said piezoelectric transformer has a desired characteristic based on the value of the measured resonant frequency", "rejecting the piezoelectric transformer if the piezoelectric transformer does not have a desired characteristic based on the value of the measured resonant frequency" and "completing the manufacturing of the piezoelectric transformer after the steps of selecting and rejecting" as recited in Applicants' claims 1, 4, 7, 10, 13, 16, 19, and 22.

Prior art rejections must be based on evidence. Graham v. John Deere Co., 383 U.S. 117 (1966). Pursuant to MPEP 706.02(a), the Examiner is hereby requested to cite a reference in support of his position that it was well known at the time of Applicants' invention to complete the manufacturing of a piezoelectric transformer after steps of selecting and rejecting as recited in Applicants' claims 1, 4, 7, 10, 13, 16, 19 and 22. If the rejection is based on facts within the personal knowledge of the Examiner, the data should be supported as specifically as possible and the rejection must be supported by an affidavit from the Examiner, which would be subject to contradiction or explanation by affidavit of Applicants or other persons. See 37 C.F.R. §1.104(d)(2).

Second, as argued in the previous Request for Reconsideration dated August 11, 2003 and Amendment dated January 15, 2004, Lejeune is directed to a method of testing semiconductor electronic components. Further, lines 9 and 10 in column 1 of Lejeune states that the semiconductor electronic components are tested "[w]hen they

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come off the production line." That is, the semiconductor electronic components are tested after manufacturing of the semiconductor electronic components is completed, NOT during manufacturing before the manufacturing process is completed. Thus, Lejeune fails to teach or suggest the step of "completing the manufacturing of the **piezoelectric transformer** after the steps of selecting and rejecting" as recited in Applicants' claims 1, 4, 7, 10, 13, 16, 19, and 22.

Third, as argued in the previous Request for Reconsideration dated August 11, 2003 and Amendment dated January 15, 2004, the Examiner has failed to explain why one of ordinary skill in the art would have been motivated to modify Sato et al., which is directed to piezoelectric transformers, in view of Lejeune, which is directed to testing of semiconductor devices.

The Examiner's allegation in the only full paragraph on page 3 of the outstanding Office Action that "such testing is typical in manufacturing and is a typical part of quality control" is (1) not supported by any evidence of record because nothing in the prior art teaches or suggests testing before manufacturing is completed and completing manufacturing after the steps of rejecting and selecting. In fact, the prior art merely teaches the very conventional step of testing AFTER manufacturing is completed.

Furthermore, Lejeune is directed solely to a method of manufacturing semiconductor devices, and is clearly not directed to a method of manufacturing electronic devices in general. There is no teaching or suggestion in the prior art to explain why the manufacturing steps of a semiconductor device of Lejeune could or should be used in the method of manufacturing a piezoelectric transformer of Sato et al.

The Examiner is reminded that Applicants' invention must be considered "as a whole". Medtronic, Inc., v. Cardiac Pacemakers, Inc., 220 USPQ 97, 99-100 (Fed. Cir. 1983). Rather than considering the invention "as a whole," the Examiner has improperly reduced Applicants' claimed invention to the broad "idea" of manufacturing an electronic device, instead of considering the specific method steps included in the method of selecting a piezoelectric transformer having a desired characteristic as recited in

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Applicants' claims 1, 4, 7, 10, 13, 16, 19 and 22. Reducing a claimed invention to an "idea" and then determining patentability of that "idea" is error. Jones v. Hardy, 220 USPQ 1021, 1024 (Fed. Cir. 1984).

Fourth, as argued in the previous Amendment dated January 15, 2004, Onishi et al. is directed to a method of driving a piezoelectric transformer and clearly fails to teach or suggest the step of "completing the manufacturing of the piezoelectric transformer after the steps of selecting and rejecting" as recited in Applicants' claims 4, 10, 16, and 22.

Fifth, as argued in the previous Amendment dated January 15, 2004, Kawada is directed to a driving circuit for a piezoelectric transformer and clearly fails to teach or suggest the step of "completing the manufacturing of the piezoelectric transformer after the steps of selecting and rejecting" as recited in Applicants' claims 4, 10, 16, and 22.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 1, 7, 13, and 19 under 35 U.S.C. § 103 (a) as being unpatentable over Sato et al. in view of Lejeune. Applicants respectfully request reconsideration and withdrawal of the rejections of claims 4, 10, 16, and 22 under 35 U.S.C. § 103 (a) as being unpatentable over Sato et al. and Lejeune in view of Onishi et al. and under 35 U.S.C. § 103 (a) as being unpatentable over Sato et al. and Lejeune in view of Kawada.

Accordingly, Applicants respectfully submit that Sato et al., Lejeune, Onishi et al., and Kawada, applied alone or in combination, fail to teach or suggest the unique combination and order of method steps recited in claims 1, 4, 7, 10, 13, 16, 19, and 22 of the present application. Claims 2, 3, 5, 6, 8, 9, 11, 12, 14, 15, 17, 18, 20, 21, 23 and 24 depend upon claims 1, 4, 7, 10, 13, 16, 19, and 22 and are therefore allowable for at least the reasons that claims 1, 4, 7, 10, 13, 16, 19 and 22 are allowable.

In view of the foregoing remarks, Applicants respectfully submit that this application is in condition for allowance. Favorable consideration and prompt allowance are solicited.

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The Commissioner is authorized to charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-1353.

Respectfully submitted,



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